S2658 SAT-A/O-20081003-00215 EchoStar Satellite Operating L.L.C. ECHOSTAR-5

File# SAT-A/0-20081003-00215 Before the FEDERAL COMMUNICATIONS COMMISSION 02/03/09 Washington, D.C. 20554

Call Sign S2658 Grant Date 02/03/09 (or other identifier)

Term Dates To see conditions

International Bureau Approved: * subject to) conditions

Chief, Policy Branch

In the Matter of

ECHOSTAR SATELLITE OPERATING L.L.C.

File No. SAT-MOD-2008 Call Sign S2739; DBS 88-01

Application to Modify Direct Broadcast Satellite Licenses at 148° W.L. to Operate the EchoStar 5 Satellite at that Orbital Location

File No. SAT-MOD-2008 Call Sign S2231

MODIFICATION APPLICATION

EchoStar Satellite Operating L.L.C. ("DISH Network") hereby requests a modification of its Direct Broadcast Satellite ("DBS") licenses at the nominal 148° W.L. orbital location to allow the operation of the EchoStar 5 DBS satellite at that location. Grant of this application will enable DISH Network to restore full 32-channel DBS capability at 148° W.L. following the recent failure of the EchoStar 2 satellite at that orbital location. It will also free EchoStar 1 for redeployment to other orbital locations. With Commission approval, DISH Network plans to begin the move of EchoStar 5 from 129° W.L. as early as January 15, 2009.²

¹ The "nominal 148° W.L. orbital location" includes all specific orbital locations within the orbital DBS "cluster" assigned to the United States under the ITU Region 2 Broadcasting Satellite Service ("BSS") plan. DISH Network is requesting authority to operate EchoStar 5 anywhere within that cluster, but intends to locate the satellite at 148.0° W.L. Feeder link and TT&C services for the satellite at 148° W.L. will be provided by DISH Network's sister company, EchoStar Corporation ("EchoStar").

² DISH Network will also supplement its request to suspend operations on channels 2-32 (even) at the 148° W.L. orbital location for more than 90 days to add a concrete timetable for resuming operations on the spectrum vacated by EchoStar 2. See SAT-MOD-20080825-00158 (filed Aug. 25, 2008).

EchoStar Satellite Operating L.L.C. SAT-A/O-20081003-00215 Call Sign: S2658 and SAT-MOD-20080825-00158 Call Sign: S2231 Attachment – February 3, 2009

EchoStar Satellite Operating L.L.C.'s (EchoStar) application for authority to operate its EchoStar 5 satellite (Call Sign S2658) to provide Direct Broadcast Satellite (DBS) service from the 148° W.L. orbital location is GRANTED. In addition, EchoStar's request for a waiver of Section 25.161(c) of the Commission's rules pertaining to the DBS channels previously used by the EchoStar 2 satellite (Call Sign S2231) is GRANTED. Accordingly, EchoStar is authorized to operate the EchoStar 5 satellite using channels 1-32 in the 12.2-12.7 GHz (space-to-Earth) and 17.3-17.8 (Earth-to-space) GHz frequency bands at the 148° W.L. orbital location. This authorization is subject to the technical specifications set forth in EchoStar's application, the Commission's rules, and the following conditions:

- 1. EchoStar's request for a partial waiver of Section 25.148(c) of the Commission's rules, 47 C.F.R. § 25.148(c) is GRANTED as conditioned. Section 25.148(c) requires DBS providers licensed after January 19, 1996 to provide service to Alaska and Hawaii where such service is technically feasible from the orbital location. This waiver is based on the following factors: 1) EchoStar's inability to provide service to Hawaii because the downlink beam on the EchoStar 5 satellite was designed for the 110° W.L. orbital location and does not provide sufficient strength to deliver programming to Hawaii from 148° W.L.; 2) EchoStar has stated that a replacement satellite for this location will be designed to provide service to both Alaska and Hawaii; and 3) EchoStar states that it will provide service to Hawaii using other satellites in its fleet.
- 2. EchoStar must maintain the EchoStar 5 satellite at 148° W.L. with a ± 0.05 degree longitudinal station-keeping tolerance. EchoStar shall not operate the EchoStar 5 satellite outside of these station-keeping limits without further authorization.
- 3. The license term for the EchoStar 5 satellite is 10 years and will begin to run on the date EchoStar certifies to the Commission that the satellite is operating from the 148° W.L. orbital location and that its operation conforms to the terms and conditions of this authorization. Within five business days of EchoStar 5 commencing operations at 148° W.L., EchoStar shall file its certification by letter to the Chief, Satellite Division, International Bureau, Federal Communications Commission.
- 4. EchoStar's request for a waiver of Section 25.161(c) of the Commission's rules, 47 C.F.R. § 25.161(c), for the EchoStar 2 satellite is GRANTED. Section 25.161(c) provides that a space station authorization will automatically terminate if the removal or modification of the facilities renders the station not operational for over 90 days unless specific authority is requested. The rule is intended to avoid unacceptable lapses in service to customers and prevent warehousing of scare orbital and spectrum resources. *See* SES Americom, Inc. *Memorandum Opinion and Order*, 21 FCC Rcd 14785, 14788 (Int'1 Bur. 2006). The EchoStar 2 satellite, which was authorized to use DBS channels 2-32 (even) at the 148° W.L. orbital location, experienced an in-orbit failure on July 14, 2008 and is no longer operating. The EchoStar 5 satellite is now authorized to operate on these DBS channels at 148° W.L. We find that a waiver is appropriate

because EchoStar 5's use of these channels promptly restores service after the unexpected failure of an in-orbit satellite and eliminates concerns over warehousing of satellite spectrum.

- 5. EchoStar is afforded 30 days from the date of the release of this authorization to decline it, as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization, as conditioned.
- 6. This grant is issued pursuant to the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately. Petitions for reconsideration under Section 1.106, 1.116, 47 C.F.R. §§ 1.106, 1.116, may be filed within 30 days of the date of the public notice stating this action was taken.

File # SAT-A/0-20081003-00215

Call Sign S 2658 Grant Date 02/03/09
(or other identifier)

Term Dates
From 02/03/09
To: See conditions

Approved: Stephen D. Duall

Conditions

Conditions

I. INTRODUCTION

DISH Network is a leading provider of DBS services with over 13 million subscribers.

DISH Network holds Commission licenses for DBS spectrum at the nominal 110°, 119°, and 148° W.L. orbital locations, where it is currently licensed to operate five DBS satellites – EchoStar 1 and 2 at 148° W.L., EchoStar 7 at 119° W.L., and EchoStar 10 and 11 at 110° W.L. In addition, DISH Network holds blanket earth station licenses to provide DBS service to the United States from Canadian-licensed Ku-band and DBS satellites – Anik F-3 at 118.7° W.L. and EchoStar 5 at 129° W.L. On July 14, 2008, EchoStar 2 suffered a catastrophic loss, necessitating a redeployment of DISH Network's fleet to resume full utilization of the spectrum at 148° W.L. The instant request is an important part of this effort.

The EchoStar 5 satellite at 129° W.L. will soon be replaced by the new Ciel 2 satellite, which is scheduled to be launched in December 2008.³ Upon successful launch, EchoStar 5 – a satellite owned by DISH Network but leased to the Canadian DBS licensee at 129° W.L. – will be freed for redeployment. By this application, DISH Network is requesting that EchoStar 5 be re-licensed as a U.S. satellite to operate at 148° W.L., where it will replace both EchoStar 1 and the lost EchoStar 2.

II. GRANT OF THIS APPLICATION IS IN THE PUBLIC INTEREST

As the Commission is aware, DISH Network is currently authorized to operate on all 32 DBS frequencies at 148° W.L. using the EchoStar 1 and EchoStar 2 satellites.⁴ The loss of EchoStar 2 has resulted in DISH Network's inability to operate on the 16 even-numbered DBS

³ See File No. SAT-MFS-20080926-01242 (filed Sep. 26, 2008).

⁴ See File Nos. SAT-MOD-20061020-00125 (granted October 1, 2007); SAT-MOD-20061020-00126 (granted Oct. 1, 2007).

channels available at that orbital location. Authorizing the 32-transponder EchoStar 5 to operate at 148° W.L. will therefore serve the public interest by enabling DISH Network to restore full DBS capability to the United States from that location. The grant of this application will also serve the public interest by freeing the 16-channel EchoStar 1 satellite for redeployment to other orbital locations.

EchoStar 5, originally a U.S.-licensed satellite, has been operating since July 2005 at 129° W.L., an orbital location allotted by the International Telecommunication Union ("ITU") to Canada, as a Canadian-licensed satellite. The letters exchanged between the two Administrations note that, under the agreement between DISH Network and Ciel, DISH Network "may move the EchoStar 5 satellite to one of its FCC licensed orbital locations in the event that EchoStar 5 is needed to replace some or all of the capacity of certain [DISH Network] satellites due to an anomaly or anomalies in [DISH Network's] satellite fleet." Moreover, "any operations of the EchoStar 5 [sic], other than at the 129° W.L. orbital location, will be subject to licensing by the FCC." The proposed operations of EchoStar 5 at 148° W.L. and its substitution for EchoStar 2 fit exactly within the contemplation of these letters and DISH Network's agreement with Ciel.

III. TECHNICAL REQUIREMENTS OF PART 25

The technical information for the EchoStar 5 satellite required to be submitted pursuant to Part 25 of the Commission's Rules is set forth in the accompanying Technical Narrative (Attachment A), FCC Form 312, and Schedule S, all of which are incorporated into this

⁵ See EchoStar Satellite L.L.C. Request for Special Temporary Authority for the EchoStar 5 Satellite, Order and Authorization, 20 FCC Rcd 11,255, at Annex 1, p.1 (2005).

⁶ *Id.* at Annex 1, p.2.

application by reference. No new ITU filing is required for EchoStar 5 to operate at 148° W.L. As explained in the Technical Narrative, EchoStar 5 will operate at medium power and wholly within the parameters of the existing USABSS-9 ITU network that is already in the Region 2 BSS Plan. The EchoStar 5 satellite complies in all respects with the Commission's technical requirements for DBS satellites, except in relation to certain geographic service limitations (discussed below), for which DISH Network is requesting a waiver akin to those previously granted by the Commission for EchoStar 1 and 2.

IV. GEOGRAPHIC SERVICE REQUIREMENTS

Under Section 25.148(c) of the Commission's rules, entities seeking DBS authorization or to modify a previously granted authorization after January 19, 1996, are required to provide comparable service to Alaska and Hawaii unless not technically feasible (the "DBS geographic service rule"). The Bureau has previously waived the requirement to serve Hawaii for the EchoStar 1 satellite at 148° W.L. because of the beam patterns of the satellite, on the condition that DISH Network provide service to that state from other satellites. The EchoStar 5 satellite, which was designed and built to provide service from the 110° W.L. orbital location, will only partially satisfy the DBS geographic service rule. Like EchoStar 1, the satellite's beam patterns allow for service to parts of Alaska but not to Hawaii.

⁷ 47 C.F.R. § 25.148(c).

⁸ See EchoStar Satellite Corp. et al., 13 FCC Rcd 8595, at ¶¶ 23, 35 (1998). See also EchoStar Satellite Corp., 18 FCC Rcd 7886, at ¶¶ 15, 28 (2003) (waiving DBS geographic service rule for EchoStar 2 at 148° W.L. on same conditions). These waivers also provided that the replacement satellites for EchoStar 1 and EchoStar 2 would have the capability of serving Alaska and Hawaii. EchoStar 5 was not planned to be a replacement satellite at 148° W.L., and is being redeployed to the 148° W.L. orbital location because of the catastrophic failure of the EchoStar 2 satellite. DISH Network commits that any true replacement satellite built to operate at 148° W.L. will be designed to provide service to both Alaska and Hawaii consistent with the original waivers.

Accordingly, DISH Network requests a similar partial waiver of the DBS geographic service rule to permit EchoStar 5 to replace EchoStar 1 and EchoStar 2 at that orbital location. The Commission may waive its rules for "good cause shown," such as when a waiver would not undermine the purpose of the rule and would serve the public interest better than if a waiver were denied. Here, there is good cause for the requested waivers. The purpose of the DBS geographic service rule, which is to ensure comparable DBS service in Alaska and Hawaii, will not be undermined because DISH Network will continue to provide such service using other satellites in its fleet – from 110° W.L., 119° W.L. and 129° W.L. Perhaps most important, the Ciel 2 satellite, which will replace EchoStar 5 at 129° W.L., will be capable of providing more robust service to both Alaska and Hawaii than EchoStar 5 can provide today.

V. STATUS OF OPERATIONS

DISH Network intends to operate all of the transponders on this DBS satellite on a non-broadcast, non-common carrier basis. ¹² As with EchoStar's current services from 148° W.L., service from the proposed EchoStar 5 satellite will be offered to consumers on a subscription basis.

⁹ 47 C.F.R. § 1.3.

¹⁰ See, e.g., PanAmSat Licensee Corp., 17 FCC Rcd 10483, at ¶ 22 (2002).

¹¹ In addition, grant of the requested waivers would better serve the public interest because denial would mean keeping EchoStar 1 at 148° W.L., a satellite that is capable of operating on only 16 DBS frequencies. In contrast, granting a partial waiver to allow EchoStar 5 to replace EchoStar 1 and EchoStar 2 would restore full 32-channel capability from 148° W.L. Consumers in Alaska will thus end up with services available to them from 148° W.L. that are not available today, while consumers in both of these states will receive better service from the soon-to-be-launched Ciel 2 satellite at 129° W.L.

¹² See 47 C.F.R. §§ 25.114(c)(11), 25.114(d)(11).

VI. WAIVER PURSUANT TO SECTION 304 OF THE COMMUNICATIONS ACT

In accordance with Section 304 of the Communications Act of 1934, as amended, 47 U.S.C. § 304, DISH Network hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise.

VII. CONCLUSION

For the foregoing reasons, DISH Network respectfully requests that the Bureau expeditiously grant this modification application by January 15, 2009.

Respectfully submitted,

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October 3, 2008

ATTACHMENT A

Technical Narrative

1. GENERAL DESCRIPTION

The ECHOSTAR-5 satellite will provide DBS services to the Western Continental United States and parts of Alaska from the 148° W.L. geostationary orbital position. The satellite can provide 32 channels in medium power mode or 16 channels in high power mode. Full frequency re-use is achieved through the use of dual circular polarization. ECHOSTAR-5 will operate on all 32 DBS channels at 148°W.L.

2. SATELLITE TRANSMIT PERFORMANCE

The downlink beam coverage of the ECHOSTAR-5 satellite from the 148°W.L. location is shown in Figure 2-1.^{1,2} The satellite employs two shaped reflectors, each operating in both RHCP and LHCP. The performance in both polarizations is nominally the same. The crosspolar isolation of the satellite transmit antennas exceeds 30 dB at all transmit frequencies. The peak antenna gain is 36.1 dBi.

Each transponder will use either a single 113 Watt Traveling Wave Tube Amplifier (TWTA) ("medium power" mode) or two paralleled 113 Watt TWTAs ("high power" mode) giving approximately a 2.6 dB increase in transmit EIRP. The losses between the TWTA output and the antenna input amount to 2.7 dB in medium power mode and 3.1 dB in high power mode. The

This beam coverage is achieved by applying appropriate pointing bias to the ECHOSTAR-5 satellite, which was originally designed for operation at the 110°W.L. orbital location, to provide CONUS coverage.

Service to Hawaii is not possible using ECHOSTAR-5 from the 148°W.L. orbital location owing to the fact that the downlink beam was originally designed for 110°W.L. and does not provide a signal sufficient strength to deliver programming to Hawaii from 148°W.L. However, the beam is maximized for coverage over the Western part of CONUS and parts of Alaska to best serve the public good.

maximum beam peak saturated EIRP level for the transponders in medium power mode is 53.9 dBW and 56.5 dBW in high power mode.

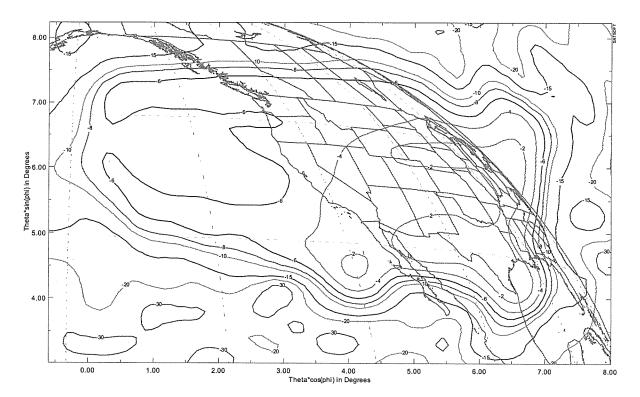


Figure 2-1: ECHOSTAR-5 Downlink Beam Coverage from 148°W.L.

3. SATELLITE RECEIVE PERFORMANCE

This uplink beam operates in both RHC and LHC polarizations. The antenna gain contours of the beam are shown in Figure 3-1. The performance in both polarizations is nominally the same. The cross-polar isolation of the satellite receive antennas exceeds 30 dB at all receive frequencies. The peak gain of the beam is 33.8 dBi, with a noise temperature of 1072K, resulting in a peak G/T of 3.5 dB/K.

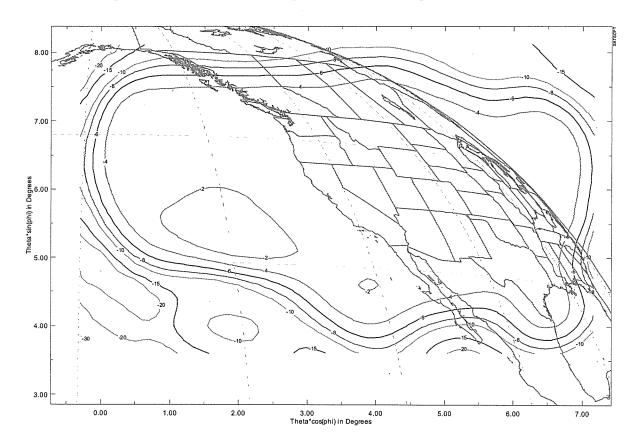


Figure 3-1: ECHOSTAR-5 Uplink Beam Coverage from 148°W.L.

4. FREQUENCY AND POLARIZATION PLANS

The ECHOSTAR-5 satellite uses the standard channel center frequencies and channel bandwidths prescribed in the ITU's Region 2 BSS Plan.³ Circular polarization is used on both the uplink and downlink.

Channel bandwidth is 24 MHz. Spacing between center frequencies of adjacent cross-polar channels is 14.58 MHz. Thus, the center frequencies of co-polar channels are offset by 29.16 MHz.

5. COMMUNICATIONS PAYLOAD CONFIGURATION

The uplink signals are received in both polarizations by the satellite receive antenna. Two active receivers are used on the satellite – one for each polarization. After appropriate down-conversion, channel filtering and amplification the signals are transmitted from the satellite using a single 113 Watt TWTA per channel in the case of medium power mode operation. Each channel can be configured to use two parallel TWTAs for high power mode operation, giving a corresponding increase in the EIRP level of approximately 2.6 dB. In total, the communications payload can support 32 channels in medium power mode, or 16 channels in high power mode, or the corresponding number of a mixture of high power and medium power mode transponders. The reconfiguration of all transponders is switchable by ground telecommand. The outputs of the TWTAs are then multiplexed into the appropriate downlink antenna ports.

6. SATURATION FLUX DENSITY AND TRANSPONDER GAIN

The Saturation Flux Density (SFD) of the uplink receive beam ranges between -75 dBW/m² (low gain) to -96 dBW/m² (high gain) at receive beam peak and is adjustable in 0.5 dB steps. The transponder gain is controlled by an Automatic Level Control (ALC) system which automatically adjusts the transponder gain to give a constant satellite transmit power level for each transponder. The maximum transponder gain is 128.7 dB.

7. RECEIVER AND TRANSMITTER CHANNEL FILTER RESPONSE CHARACTERISTICS

The typical receiver and transmitter frequency responses of each RF channel, as measured between the receive antenna input and transmit antenna, fall within the limits shown in Table 7-1 below.

In addition, the frequency tolerances of §25.202(e) and the out-of-band emission limits of §25.202(f) (1), (2) and (3) will be met.

Table 7-1: Typical Receiver and Transmitter Filter Responses

Offset from Channel Center Frequency (MHz)	Receiver Filter Response (dB)	Transmitter Filter Response (dB)
± 5	> -0.5	>-0.4
±7	>-0.7	>-0.5
±9	>-1.0	>-0.8
± 11	>-1.5	>-1.7
±12	> -2.0	> -3.6
±17.5	<-18	<-8
±20.2	<-38	<-18
±27.2	< -50	< -35

8. EMISSION DESIGNATORS AND ALLOCATED BANDWIDTH OF EMISSION

The emission designator for the uplink and downlink is 24M0G7W. This emission has an allocated bandwidth of 24 MHz.

For TT&C, the emission designators and allocated bandwidths will be as follows:

Telecommand (including ranging):

800KG2D (800 kHz)

Telemetry (including ranging):

800KG2D (800 kHz)

9. SPACECRAFT DESCRIPTION

The ECHOSTAR-5 satellite's physical characteristics, electrical characteristics, etc., are contained in the associated Schedule S form.

10. EARTH STATIONS

The primary subscriber earth station antennas to be used with the ECHOSTAR-5 satellite will range between 45 cm and 60 cm, although slightly larger antennas might be used in certain circumstances.

The feeder link earth stations will be located at the existing facilities of DISH Network's affiliate, EchoStar Corporation ("EchoStar"), in Cheyenne, WY and Gilbert, AZ. EchoStar will file any necessary earth station modification applications with the FCC for the feeder link earth stations that will operate with ECHOSTAR-5 at the 148°W.L. orbital location.

11. TT&C

A summary of the TT&C subsystem performance is given in Table 11-1.

Table 11-1: Summary of the TT&C Subsystem Performance

Parameter	Performance
On-Station Command Frequency	17,301.5 MHz
Uplink Flux Density	Between -75 and -96 dBW/m ²
Uplink Polarization	LHCP
On-Station Telemetry Frequencies	12,201 MHz 12,202 MHz
Maximum Downlink EIRP	18 dBW
Downlink Polarization	LHCP

12. LINK BUDGETS

Representative link budgets for the DBS transmissions, which include details of the transmission characteristics, performance objectives and earth station characteristics, are provided in the

associated Schedule S submission. Link budgets for the TT&C transmissions are also included therein.

13. ORBITAL DEBRIS MITIGATION PLAN

DISH Network notes that several sections of Section 25.114(d) require a statement that the station operator has made certain assessments.⁴

13.1 Spacecraft Hardware Design

The ECHOSTAR-5 satellite was designed and manufactured by Space Systems/Loral and was launched in 1999. The satellite is not expected to undergo any planned release of debris during its operation.

The satellite manufacturer has assessed and limited the probability of the satellite becoming a source of debris by collisions with small debris or meteoroids of less than one centimeter in diameter that could cause loss of control and prevent post-mission disposal. These risks have been limited through component placement and the use of redundant systems.

The ECHOSTAR-5 satellite has separate TT&C and propulsion subsystems that are necessary for end-of-life disposal. The spacecraft TT&C system, vital for orbit raising, is extremely rugged with regard to meteoroids smaller than 1 cm, by virtue of its redundancy, shielding, separation of components and physical characteristics. An omni-directional antenna and wide angle horn system were used principally during orbit raising. The redundant command receivers and decoders and telemetry encoders and transmitters are located within a shielded area and physically separated. A single rugged thruster and shielded propellant tank provided the energy for orbit raising. Otherwise, there are no single points of failure in the system.

⁴ 25 C.F.R. §§25.114(d)(14)(i-iii).

13.2 Minimizing Accidental Explosions

The probability of accidental explosions during and after completion of mission operations has likewise been assessed and limited. A Failure Mode Verification Analysis has also been conducted, and the probability of accidental explosions has been limited through extensive monitoring of the ECHOSTAR-5 satellite's batteries and fuel tanks for pressure and temperature. Furthermore, bipropellant mixing is prevented by the use of valves that prevent backwards flow in propellant lines and pressurization lines. Excessive battery charging or discharging is limited by a monitoring and control system which will automatically limit the possibility of fragmentation. Corrective action, even if not automatically undertaken, will be immediately undertaken by the spacecraft operator to avoid destruction and fragmentation. Thruster temperatures, impulse and thrust duration are carefully monitored, and any thruster may be turned off via redundant valves. At the end of the satellite's life, all energy sources will be depleted. Specifically, the batteries will be left in a permanent state of discharge, chemical propulsion systems will be depleted, and the electrical propulsion system will be disabled.

13.3 Safe Flight Profiles

In considering current and planned satellites that may have a station-keeping volume that overlaps the ECHOSTAR-5 satellite, DISH Network has reviewed the lists of FCC licensed satellite networks, as well as those that are currently under consideration by the FCC. In addition, foreign-licensed satellites that are known to be operational or under construction, as well as networks for which a request for coordination has been published by the ITU in the vicinity of 148°W.L., have also been reviewed.

Based on the preceding, DISH Network concludes there is no requirement to physically coordinate the ECHOSTAR-5 satellite with another satellite operator at the present time.

13.4 Post Mission Disposal

Upon mission completion, the ECHOSTAR-5 satellite will be maneuvered to a disposal orbit at least 300 km above its operational geostationary orbit.⁵ Based on data from the satellite manufacturer, less

The ECHOSTAR-5 satellite was launched in 1999. Pursuant to the Commission's *Mitigation of Orbital Debris*, Second Report and Order, 19 FCC Rcd 11567 (2004), a calculation of the

than 7 kg of fuel will be required to achieve this. Accordingly, 7 kg of fuel will be reserved at the end of the satellite's life. The fuel reserve will be calculated using two methods. The first method is the pressure-volume temperature method, which uses tank pressure and temperature information to determine remaining propellant. The second method is the bookkeeping method, which evaluates the flow rate at average pressure and total thruster on-time of orbital maneuvers to determine the amount of propellant used. EchoStar has assessed fuel gauging uncertainty and has provided an adequate margin of fuel to address such uncertainty.

14. INTERFERENCE ANALYSES - ANNEXES 1 TO APPENDICES 30 AND 30A

The ECHOSTAR-5 satellite will be operated at the 148° W.L. orbital position under the envelope of the parameters of the existing USABSS-9 ITU network. This network filing (AP30-30A/E/216) was originally submitted to the ITU in 1998 (Part A published in IFIC 2485) and has been incorporated into the Region 2 BSS Plan (Part B published in IFIC 2566). No further coordination of this network filing is therefore required.

The USABSS-9 network provides for a satellite downlink EIRP level of 53.6 dBW and a CONUS beam that closely resembles the actual beam of the ECHOSTAR-5 satellite. The ECHOSTAR-5 satellite will be operated in medium power mode only, which results in a beam peak EIRP level of 53.9 dBW that is only 0.3 dB higher than the USABSS-9 network filing. Allowing for a small amount of output back-off, the actual EIRP level from ECHOSTAR-5 will not exceed that of the USABSS-9 network filing.

Therefore no further ITU submission or interference assessment needs to be made at this time to permit the ECHOSTAR-5 satellite to be operated at 148°W.L. with its transponders in medium power mode.

satellite's disposal orbit according to the IADC formula is not required. See Second Report and Order at ¶81 ("we will grandfather all on orbit GEO spacecraft that were launched as of the release of the *Notice* in this proceeding").

<u>CERTIFICATION OF PERSON RESPONSIBLE FOR PREPARING ENGINEERING INFORMATION</u>

I hereby certify that I am the technically qualified person responsible for preparation of the engineering information contained in this application, that I am familiar with Part 25 of the Commission's rules, that I have either prepared or reviewed the engineering information submitted in this application and that it is complete and accurate to the best of my knowledge and belief.

/s/

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Dated: October 3, 2008